

**Project:**

1. 4X210MW NTPC Kahalgaon TPS Stage-I
2. 3X200MW NTPC Ramagundam TPS, Stage-I
3. 2X250MW NTPC Barauni TPS

Corrigendum-IV  
dated 25.02.2022

Supply of Transformers

Tender Ref. No. 77/21/6107/RAJ  
Dated 29.01.2022

**Please note the following point**

Sl. No.	Event Description	TO NOTE
1	Techno-commercial	Corrigendum-IV is being issued to include the following: 1. Extend the due date of submission from 25.02.22(11 AM) to 04.03.22 (11 AM). 2. Issuance of Annexure-A 3. Issuance of Annexure-B 4. Issuance of Annexure-PVC
2	All other terms & conditions	Remain unchanged.

**Note:**

Also, please note that the full tender document can be downloaded from the website <https://eprocurebhel.co.in/nicgep/app>.

All other terms and conditions remain the same as per the original enquiry and its subsequent amendment / addendum / corrigendum /clarification.

Any further addendum / corrigendum/ clarification/ notice of due date extension such issued shall be part of the bidding documents and this will be available at the web site from where the original documents have been received / downloaded by the bidder.

Hence, bidders are requested to visit the web site on regular basis.

## PROJECTS:

- 1) 4X210MW NTPC KAHALGAON TPS STAGE-I
- 2) 3X200MW NTPC RAMAGUNDAM TPS, STAGE-I
- 3) 2X250MW NTPC BARAUNI TPS

ENQUIRY NO. : 77/21/6107/RAJ

## ITEM/ WORK: SUPPLY OF TRANSFORMERS

S.NO.	CLAUSE NO. & DOCUMENT NO.	AS PER EXISTING TENDER	SHALL BE READ AS
1	Clause 14 of SCC (Price Basis)	<p><b>Price Basis for Supply of goods:</b></p> <p>Firm till completion of contract, FOR Site inclusive of packing &amp; forwarding charges, freight charges, any other taxes &amp; duties except Goods &amp; Service Tax (GST).</p>	<p><b>Price Basis for Supply of goods:</b></p> <p>FOR Site inclusive of packing &amp; forwarding charges, freight charges, any other taxes &amp; duties except Goods &amp; Service Tax (GST).</p> <p>PVC applicable as per Annexure-PVC</p>
2	Clause 15 of SCC (Submission of Performance Bank Guarantee (PBG))	PBG, in line with clause no 11 of general commercial terms & conditions of GCC, rev-01, is to be submitted within 10 days from the date of Letter of Intent (LOI).	<p><b>Bank Guarantee shall be submitted as mentioned below:</b></p> <ol style="list-style-type: none"> <li>1. 3% for X210MW NTPC KAHALGAON TPS STAGE-I</li> <li>2. 3% for 3X200MW NTPC RAMAGUNDAM TPS, STAGE-I</li> <li>3. 10% for 2X250MW NTPC BARAUNI TPS</li> </ol> <p><b>Note (applicable for 1 &amp; 2): BG shall be of 3% of contract value with validity till start of guarantee/warranty period, thereafter BG of 10% of contract value shall be provided till completion of guarantee/warranty period.</b></p>
3	Clause 26 of SCC (MSE Suppliers)	Any Bidder falling under MSE/ SC/ST category/ SSI unit shall furnish the details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.	MSE suppliers can avail the intended benefits as per MSMED Act 2006 only if they submit along with the offer (Part-1 bid in case of two or three part bid), Valid UDYAM /UAM/ EM-2 Certificate. Date to be reckoned for determining the deemed validity will be the date of bid opening (Part-1 in case of two or three part bid). Non-submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable

	<p>If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE/SC/ST Owned category/ SSI unit.</p> <p>MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (format enclosed vide Annexure-I where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part-1 in case of two or three part bid). Non-submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer.</p>	<p>for this enquiry if any deficiency in the above-required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal.</p>
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## REPLIES TO PRE-BID QUERIES

S.No.	As per Specification	Suggested	Remark	BHEL Remarks
1	<p><b>Clause 10 of NIT:</b> BHEL will conduct RA with Techno-Commercially qualified bidders. Date of RA will be intimated separately.</p> <p><b>Clause 18 of NIT:</b> "BHEL shall be resorting to Reverse Auction (RA) (New RA Guidelines are available on <a href="https://www.bhel.com/supplier-registration">https://www.bhel.com/supplier-registration</a>) for this tender. RA shall be conducted among all the techno-commercially qualified bidders.</p>	Please delete these clauses.	Transformer is a custom built product based on engineering design, therefore, Reverse Action (RA) cannot be justified.	Tender terms and conditions prevail
2	<b>Clause 14 of SCC:</b> Firm till completion of contract, FOR Site inclusive of packing & forwarding charges, freight charges, any other taxes & duties except Goods & Service Tax (GST).	Prices shall be variable as per IEEMA with base date one month prior from tender submission.	Due to volatility in the price of raw materials, generally most of the tenders stipulate IEEMA Price Variation clause like UPPTCL, HVPNL, RRVPNL & PGCIL etc.	Please refer Annexure-PVC
3	Section V (Documentation) of Technical Specification: First submission within three (7) days from the date of PO	Section V (Documentation) of Technical Specification: First submission within twelve (12) weeks from the date of PO	-	Tender terms and conditions prevail
4	<b>Clause No. 9 of SCC: Delivery:</b> Within 5 months from the date of manufacturing clearance. Supervision of Commissioning: Vendor to report at site for supervision within 10 days from the date of intimation.	Clause No. 9 of SCC: Contract Schedule: 9 months from date of manufacturing clearance for supply/CAT-I approval of Drawings. 3 Months extra for Short Circuit Test.	-	Tender terms and conditions prevail
5	<b>Clause No. 7.0 (GCC), Validity of offer:</b> Vendor's offers shall be submitted with the following validity periods: i. Original offer shall be valid for four months from Part-I opening. ii. If revised price bid/price impact is asked by BHEL, the validity of the same shall be two months from the date of revised price bid/price impact or four months from Part-I opening, whichever is later. iii. Prices of recommended spares, O&M spares and Mandatory spares (where ever these are optional items) shall be valid till two years from the date of PO. iv. Unit prices for scope addition/deletion shall be valid till two years from the date of PO.	Clause No. 7.0 (GCC) Validity of offer: Vendor's offers shall be submitted with the following validity periods:  For Sl. No. i & ii Offer shall be valid for four months from Part-I opening date  For Sl. No. iii & iv. Not applicable Please delete these clauses.	-	Tender terms and conditions prevail

**REPLIES TO PRE-BID QUERIES**

S.No.	As per Specification	Suggested	Remark	BHEL Remarks
6	<p><b>Clause No. 13 of SCC Liquidated Damages:</b> Purchaser reserves the right to recover from seller/contractor the liquidated damages @ 0.5% of the delayed portion of supplies (basic price) per week or part there off,subject to a maximum of 10% of the total contract value (basic price), if the seller/ontractor fails to deliver any part of the ordered material within the period stipulated in the Order/ Contract.</p>	<p>Clause No. 13 of SCC Liquidated Damages: Purchaser reserves the right to recover from the seller/contractor the liquidated damages @ 0.5% of the Ex-Works Price of the undelivered portion excluding GST per week or part thereof, subject to a maximum of 5% of the Ex-Works Price of the undelivered portion excluding GST, if the Seller/Contractor fails to deliver any part of the ordered material within the period stipulated in the Order/ Contract.</p>	-	Tender terms and conditions prevail
7	<p><b>Clause No. 16.2.2 of GCC:</b> Purchaser reserves the right to purchase from elsewhere on account of and at the risk and cost of Seller/Contractor, with notice to Seller/Contractor, the stores due for delivery but not so delivered, or their equivalent without cancelling the Order/Contract in respect of stores not yet due for delivery. The manner and method of such purchase shall be at the discretion of the Purchaser. The actual cost incurred for such purchases along with the departmental charges @ 15% will be recovered from the bidder.</p> <p><b>Clause No. 16.2.3 of GCC:</b> Purchaser reserves the right to cancel the Order/Contract or a portion thereof for the stores not so delivered at the risk and cost of the Seller/Contractor and the Seller/ Contractor shall be liable to the Purchaser for any excess cost thereof. The actual cost incurred for such purchases along with the departmental charges @ 15% will be recovered from the bidder.</p>	Please delete these clauses.	-	Tender terms and conditions prevail
8	<p><b>Clause No. 9.6 of GCC Release of Payment:</b> Vendors shall submit documents for payment directly to BHEL. Payment will be released within 45 days after receipt of complete documents as per order/ contract.</p>	<p>Clause No. 9.6 of GCC Release of Payment: Vendors shall submit documents for payment directly to BHEL. Payment will be released within 15 days after receipt of complete documents as per order/ contract.</p>	-	Tender terms and conditions prevail

REPLIES TO PRE-BID QUERIES				
S.No.	As per Specification	Suggested	Remark	BHEL Remarks
9	<p><b>Clause No. 11.2 of GCC Contract Performance Bank Guarantee:</b> For original order / contract values above Rs. 25 Lakhs (excluding taxes, duties and freight), the vendor shall submit Contract Performance Bank Guarantee (as per Annexure-IV) for 10% of Order/ Contract value (excluding taxes, duties &amp; freight) before first submission of documents for payment to cover the due performance of Order/ Contract and to fulfill the guarantee conditions stipulated in the Order/ Contract. However, BG value can be proportionality reduced after completion of Guarantee period Unit-wise/ Lot-wise/Set-wise, as applicable.</p>	<p>Clause No. 11.2 of GCC Contract Performance Bank Guarantee: For original Order/contract values above Rs. 25 Lakhs (excluding taxes, duties and freight), the vendor shall submit Corporate Guarantee (as per Annexure-IV) for 3% of Order/Contract value (excluding taxes, duties &amp; freight) before first submission of documents for payment to cover the due performance or Order/Contract and to fulfill the guarantee condition stipulated in the Order/Contract. However, BG value can be proportionality reduced after completion of Guarantee period Unit-wise/ Lot-wise/ Setwise, as applicable.</p>	-	Please refer Annexure-A
10	<p><b>Clause No. 22 of SCC: Submission of Security cum Performance Bank Guarantee (PBG):</b> PBG, in line with clause no. 11 of general commercial terms &amp; conditions of GCC, rev-01, is to be submitted within 10 days from the date of Letter of Intent (LOI). Validity of the Bank Guarantee shall be for the entire Guarantee period +claim period as per RBI guidelines (min. 3 months). Initially, it should be at least 24 months + 03 months claim period as per RBI guidelines (3 months), later extended to cover the entire guarantee period, two months before its expiry". Bidder agrees to submit performance security required for execution of the contract within the time period mentioned. In case of delay in submission of performance security, enhanced performance security which would include interest (SBI rate + 6%) for the delayed period, shall be submitted by the bidder. Further, if performance security is not submitted till such time the first bill becomes due, the amount of performance security due shall be recovered as per terms defined in NIT / contract, from the bills along with due interest.</p>	Please delete this clause.	-	Not acceptable. Vendor to refer Annexure-A

**PRICE VARIATION FORMULA FOR OIL FILLED TRANSFORMERS**

The prices are variable as per IEEMA price variation formula as given below with base month as one month prior to the date of tendering with ceiling limit of 20% on positive side and there is no limit on negative side.

**Price variation formula for copper wound service (for Single & Three phase of ratings up to 2500kVA and voltage up to 33kV)**

$$P = \frac{P_0}{100} \left\{ 7 + 41 \frac{C}{C_0} + 23 \frac{ES}{ES_0} + 10 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 8 \frac{TO}{TO_0} + 6 \frac{W}{W_0} \right\}$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula
- P<sub>0</sub> = Price quoted/confirmed
- C<sub>0</sub> = Price of CC Copper rods (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IS<sub>0</sub> = Price of HR Coil of 3.15 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IM<sub>0</sub> = Price of Insulating materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt of India (Base: 2016 = 100). This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Copper (C<sub>0</sub>), Transformer Oil (TO<sub>0</sub>), CRGO Steel Sheets (ES<sub>0</sub>), HR Coil (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.



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**Cir. No.: 140/ PVC/DT\_PT/05**

**November 10, 2021**

To All Members of Distribution Transformers Division, SEBs and other listed purchasing bodies.

**Sub: Revision in Price Variation Formulae for Power and Distribution Transformers  
 Evolution of new PV formulae for Solar Inverter Duty Transformers**

In light of changes in technology, manufacturing practises and substantial fluctuations in raw material prices over past 6-7 years, IEEMA has decided to revise PV Clauses for Power and Distribution Transformers and evolve new PV formulae for Solar Inverter Duty Transformers considering huge potential of Solar Inverter Duty Transformers in coming period as Renewable and clean energy resources (Solar and Wind) is going to play a major role in the Generation mix.

IEEMA had circulated draft PV clauses of Power and Distribution Transformer and new formula for Solar Inverter Duty Transformers vide Cir. No. 134/PVC/DT\_PT/05 dated 30 September 2021. After incorporating changes suggested by the industry stakeholders on the Distribution Transformer PV formulae; we are making all these Price Variation formulae operational from 1<sup>st</sup> September 2021.

We have enclosed all PV clauses applicable for Power and Distribution Transformer and new formula for Solar Inverter Duty Transformers which are effective from 1<sup>st</sup> September 2021.

Although, these PV clauses are made effective from 1<sup>st</sup> September 2021, practically they can be incorporated in all the current new tenders/contracts starting from 1<sup>st</sup> October 2021.

We request and recommend all the users & stakeholders including Utilities, PSUs etc. to incorporate these PV formulae in all the new tenders/contracts henceforth.

Salient points of the revised Transformer PV formulae:

1. As per contemporary tendering processes, to cover Dist. Transformers of above 10 MVA and Up to 33 KV DTs, definition of Distribution Transformers has been proposed as Transformers Up to 33 KV and definition of Power Transformers has been proposed as Transformers above 33 KV
2. The PV formulae for Distribution Transformers have been made generic by removing reference of BEE or IS 1180 from all PV formulae since practically now almost all Transformers up to 2,500 KVA are manufactured as per IS 1180 and these PV formulae can also be used for non BIS /Non BEE purposes also; if required
3. It was decided to discontinue old PV formulae for Non BIS/Non BEE DTs effective from June 2015 and subsequently discontinuation of publishing applicable price of other CRGO Steel Lamination and price of Aluminium rod (Domestic) from the monthly PV circulars.
4. Copper price source has been proposed as Domestic Copper price of 8 mm since majority of manufacturers procure it locally and it also aligns to price published in other IEEMA PV circulars
5. Common price of CRGO Laminations to be used for all proposed PV formulae
6. Change in lead time period prior to date of delivery for some PV formulae as per contemporary manufacturing practises.



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7. Cost weightages for Distribution Transformer PVCs have been re-worked and revised post the suggestions received from industry stakeholders on the Draft PV formulae.

For pending contracts, for the date of delivery as given below, to arrive at the final price variation, we recommend using the following two stage method, which is a standard institutionalized methodology adopted by IEEMA for change over in all IEEMA PV clauses. Applicability of this two stage method is recommended as under:

For Power Transformer up to 400 KV – For Delivery on or after 1<sup>st</sup> December 2021

For Power Transformer Above 400 KV – For Delivery on or after 1<sup>st</sup> January 2022

For Distribution Transformer – For Delivery on or after 1<sup>st</sup> November 2021

1. Calculate price variation 'P' from applicable prices/indices as per your base date / date of tendering up to September 2021 i.e. considering all prices/indices published in PV circular of September 2021 at numerator place; using applicable IEEMA PV clauses of Transformers effective from April / June 2015
2. Treat the above calculated 'P' as 'P<sub>0</sub>' and calculate final price variation considering all prices / indices published in PV circular of September 2021 applicable for revised PV clauses of Transformer effective from 1<sup>st</sup> September 2021 as base prices/indices (at the denominator place) up to the applicable prices/indices as per the date of delivery; applicable as per revised relevant PV clause of Transformer effective from 1<sup>st</sup> September 2021.

Please find enclosed a sample two stage calculation showing month references for selecting the price/indices as per above method.

**Director**

### Sample calculation showing month references for two stage method

#### For Power Transformer up to 400 KV --- Two stage method if delivery period falls on or after 1st December 2021

For e.g.		date of tendering - January 2021		Date of delivery - December 2021	
STEP I			STEP II		
	Jan-21	Sep-21		Sep-21	Dec-21
Prices/ Indices	Month applicable for Date of Tendering as per old PV formula	Month applicable for Date of Delivery (FIXED)	Prices/ Indices	Month applicable for Date of Tendering (FIXED)	Month applicable for Date of Delivery as per new PV formula
Fix			Fix		
CU	Dec-20	Sep-21	CU	Sep-21	Oct-21
ES	Dec-20	Sep-21	ES	Sep-21	Oct-21
IS	Dec-20	Sep-21	IS	Sep-21	Oct-21
IM	Dec-20	Sep-21	IM	Sep-21	Oct-21
TO	Dec-20	Sep-21	TO	Sep-21	Nov-21
W	Oct-20	Jul-21	W	Jul-21	Sep-21

#### For Power Transformer Above 400 KV --- Two stage method if delivery period falls on or after 1st January 2022

For e.g.		date of tendering - January 2021		Date of delivery - January 2022	
STEP I			STEP II		
	Jan-21	Sep-21		Sep-21	Jan-22
Prices/ Indices	Month applicable for Date of Tendering as per old PV formula	Month applicable for Date of Delivery (FIXED)	Prices/ Indices	Month applicable for Date of Tendering (FIXED)	Month applicable for Date of Delivery as per new PV formula
CU	Dec-20	Sep-21	CU	Sep-21	Oct-21
ES	Dec-20	Sep-21	ES	Sep-21	Oct-21
IS	Dec-20	Sep-21	IS	Sep-21	Oct-21
IM	Dec-20	Sep-21	IM	Sep-21	Oct-21
TO	Dec-20	Sep-21	TO	Sep-21	Nov-21
W	Oct-20	Jul-21	W	Jul-21	Oct-21

#### In step I calculation,

prices/indices to be taken from circular ref IEEMA(PVC)/PWR\_DIST\_TRF of applicable month as per old PV formulae wef Apr 2015

#### In step II calculation,

prices/indices to be taken from circular ref IEEMA(PVC)/PWR\_DIST\_TRF (R-1) for applicable month as per new PV formulae wef Sep 2021

**For Distribution Transformer --- Two stage method if delivery period falls on or after 1st November 2021**

For e.g. date of tendering - January 2021			Date of delivery - November 2021		
STEP I			STEP II		
	Jan-21	Sep-21		Sep-21	Nov-21
Prices/ Indices	Month applicable for Date of Tendering as per old PV formula	Month applicable for Date of Delivery (FIXED)	Prices/ Indices	Month applicable for Date of Tendering (FIXED)	Month applicable for Date of Delivery as per new PV formula
Fixed			Fixed		
AL/Cu	Dec-20	Sep-21	AL/Cu	Sep-21	Oct-21
ES	Dec-20	Sep-21	ES	Sep-21	Oct-21
IS	Dec-20	Sep-21	IS	Sep-21	Oct-21
IM	Dec-20	Sep-21	IM	Sep-21	Oct-21
TO	Dec-20	Sep-21	TO	Sep-21	Oct-21
W	Oct-20	Jul-21	W	Jul-21	Aug-21

**In step I calculation,**

prices/indices to be taken from circular ref IEEMA(PVC)/PWR\_DIST\_TRF of applicable month as per old PV formulae wef Apr 2015

**In step II calculation,**

prices/indices to be taken from circular ref IEEMA(PVC)/PWR\_DIST\_TRF (R-1) for applicable month as per new PV formulae wef Sep 2021

IEEMA/PVC/DIST\_CU\_upto 2.5 MVA/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR COPPER WOUND DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(For single & three phase of ratings up to and including 2,500 KVA and voltage class up to 33 KV)  
supplied against domestic contracts**

This price variation clause is applicable for 'Copper Wound Distribution Transformers', with rating up to and including 2,500 KVA and voltage class up to 33 KV supplied against domestic contracts. A separate price variation clause IEEMA/PVC/DIST\_CU\_upto 2.5 MVA/DE/2021 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 7 + 41 \frac{C}{C_0} + 23 \frac{ES}{ES_0} + 10 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 8 \frac{TO}{TO_0} + 6 \frac{W}{W_0} \right)$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P<sub>0</sub> = Price quoted/confirmed.
- C<sub>0</sub> = Price of CC copper rods (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IS<sub>0</sub> = Price of HR Coil of 3.15 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.



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IEEMA/PVC/DIST\_CU\_upto 2.5 MVA/2021

Effective from: 01 September 2021

$W_0$  = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Copper ( $C_0$ ), Transformer Oil ( $TO_0$ ), CRGO Steel Sheets ( $ES_0$ ), HR Coil ( $IS_0$ ) and Insulating material ( $IM_0$ ) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. ( $W_0$ ) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of tendering.

- $C$  = Price of CC copper rods (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $ES$  = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $IS$  = Price of HR Coil of 3.15 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $IM$  = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $TO$  = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $W$  = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Copper ( $C$ ), Transformer Oil ( $TO$ ), CRGO Steel Sheets ( $ES$ ), HR Coil ( $IS$ ) and Insulating material ( $IM$ ) should be as on 1<sup>st</sup> November 2022 and all India average consumer price index number ( $W$ ) should be for the month of September 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of delivery.

IEEMA/PVC/DIST\_CU\_upto 2.5MVA/2021

Effective from: 01 September 2021

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

## Notes:

- (a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- (b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- (c) The details of prices are as under:
1. Price of 8 mm CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
  3. Price of steel is the average retail price of HR Coil 3.15 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- (d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_o}{92} \left( 7 + 41 \frac{C}{C_o} + 23 \frac{ES}{ES_o} + 10 \frac{IS}{IS_o} + 5 \frac{IM}{IM_o} + 6 \frac{W}{W_o} \right)$$

Where description of P, P<sub>o</sub>, C, ES, IS, IM, W etc. remains same as mentioned earlier.



Director

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IEEMA/PVC/DIST\_AL\_upto 2.5 MVA/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR ALUMINIUM WOUND DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(For single & three phase of ratings up to and including 2,500 KVA and voltage class up to 33 KV)  
supplied against domestic contracts**

This price variation clause is applicable for 'Aluminium Wound Distribution Transformers', with rating up to and including 2,500 KVA and voltage class up to 33 KV supplied against domestic contracts. A separate price variation clause IEEMA/PVC/DIST\_AL\_upto 2.5 MVA/DE/2021 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 8 + 22 \frac{AL}{AL_0} + 36 \frac{ES}{ES_0} + 12 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 10 \frac{TO}{TO_0} + 7 \frac{W}{W_0} \right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P<sub>0</sub> = Price quoted/confirmed.

AL<sub>0</sub> = LME CSP Average of Aluminium (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

IS<sub>0</sub> = Price of HR Coil of 3.15 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

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IEEMA/PVC/DIST\_AL\_upto 2.5 MVA/2021

Effective from: 01 September 2021

W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Aluminium (AL<sub>0</sub>), Transformer Oil (TO<sub>0</sub>), CRGO Steel Sheets (ES<sub>0</sub>), HR Coil (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of tendering.

- AL = LME CSP Average of Aluminium (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IS = Price of HR Coil of 3.15 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Aluminium (AL), Transformer Oil (TO), CRGO Steel Sheets (ES), HR Coil (IS) and Insulating material (IM) should be as on 1<sup>st</sup> November 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of delivery.

IEEMA/PVC/DIST\_AL\_upto 2.5 MVA/2021

Effective from: 01 September 2021

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes:

- (a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- (b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- (c) The details of prices are as under:
1. Price of LME average Cash SELLER Settlement price of Primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US\$ per MT is converted in Indian Rs./MT using exchange rate and adding appropriate customs duty.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
  3. Price of steel is the average retail price of HR Coil 3.15 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_0}{90} \left( 8 + 22 \frac{AL}{AL_0} + 36 \frac{ES}{ES_0} + 12 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 7 \frac{W}{W_0} \right)$$

Where description of P, P<sub>0</sub>, AL, ES, IS, IM, W etc. remains same as mentioned earlier



Director

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IEEMA/PVC/DIST\_CU\_Above 2.5 MVA/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR COPPER WOUND DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(of ratings above 2,500 KVA and voltage class up to 33 KV)  
supplied against domestic contracts**

This price variation clause is applicable for 'Copper Wound Distribution Transformers' for single & three phase of rating above 2,500 KVA and voltage class up to 33 KV; supplied against domestic contracts. A separate price variation clause IEEMA/PVC/DIST\_CU\_Above 2.5 MVA/DE/2021 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 8 + 40 \frac{C}{C_0} + 24 \frac{ES}{ES_0} + 8 \frac{IS}{IS_0} + 4 \frac{IM}{IM_0} + 8 \frac{TO}{TO_0} + 8 \frac{W}{W_0} \right)$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P<sub>0</sub> = Price quoted/confirmed.
- C<sub>0</sub> = Price of CC copper rods (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IS<sub>0</sub> = Price of MS Plate of 6 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

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IEEMA/PVC/DIST\_CU\_Above 2.5 MVA/2021

Effective from: 01 September 2021

W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Copper (C<sub>0</sub>), Transformer Oil (TO<sub>0</sub>), CRGO Steel Sheets (ES<sub>0</sub>), MS Plate (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of tendering.

- C = Price of CC copper rods (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** months prior to the date of delivery.
- IS = Price of MS Plate of 6 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Copper (C), Transformer Oil (TO), MS Plate (IS) and Insulating material (IM) should be as on 1<sup>st</sup> November 2022, price of CRGO Steel Sheets (ES) as on 1<sup>st</sup> October 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.





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## Notes:

- a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- c) The details of prices are as under:
  1. Price of 8 mm CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
  3. Price of steel is the average retail price of MS Plate 6 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_o}{92} \left( 8 + 40 \frac{C}{C_o} + 24 \frac{ES}{ES_o} + 8 \frac{IS}{IS_o} + 4 \frac{IM}{IM_o} + 8 \frac{W}{W_o} \right)$$

Where description of P, P<sub>o</sub>, C, ES, IS, IM, W etc. remains same as mentioned earlier.

Director

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IEEMA/PVC/DIST\_AL\_Above 2.5 MVA/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR ALUMINIUM WOUND DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(of ratings above 2,500 KVA and voltage class up to 33 KV)  
supplied against domestic contracts**

This price variation clause is applicable for 'Aluminium Wound Distribution Transformers' for single & three phase of rating above 2,500 KVA and voltage class up to 33 KV; supplied against domestic contracts. A separate price variation clause IEEMA/PVC/DIST\_AL\_Above 2.5 MVA/DE/2021 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 9 + 16 \frac{AL}{AL_0} + 35 \frac{ES}{ES_0} + 14 \frac{IS}{IS_0} + 6 \frac{IM}{IM_0} + 11 \frac{TO}{TO_0} + 9 \frac{W}{W_0} \right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P<sub>0</sub> = Price quoted/confirmed.

AL<sub>0</sub> = LME CSP Average of Aluminium (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

IS<sub>0</sub> = Price of MS Plate of 6 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.



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Effective from: 01 September 2021

W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Aluminium (AL<sub>0</sub>), Transformer Oil (TO<sub>0</sub>), MS Plate (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and CRGO Steel Sheets (ES<sub>0</sub>) should be as on October 2021, and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of tendering.

- AL = LME CSP Average of Aluminium (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IS = Price of MS Plate of 6 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Aluminium (AL), Transformer Oil (TO), MS Sheet (IS) and Insulating material (IM) should be as on 1<sup>st</sup> November 2022 and CRGO Steel Sheets (ES) should be as on 1<sup>st</sup> October 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

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IEEMA/PVC/DIST\_AL\_Above 2.5 MVA/2021

Effective from: 01 September 2021

## Notes:

- a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- c) The details of prices are as under:
  1. Price of LME average Cash SELLER Settlement price of Primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US\$ per MT is converted in Indian Rs./MT using exchange rate and adding appropriate customs duty.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
  3. Price of steel is the average retail price of MS Plate 6 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_o}{89} \left( 9 + 16 \frac{AL}{AL_o} + 35 \frac{ES}{ES_o} + 14 \frac{IS}{IS_o} + 6 \frac{IM}{IM_o} + 9 \frac{W}{W_o} \right)$$

Where description of P, P<sub>o</sub>, AL, ES, IS, IM, W etc. remains same as mentioned earlier.

Director



IEEMA/PVC/DIST\_DT\_CU/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR COPPER WOUND DRY TYPE DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(Of ratings up to and including 2,500 KVA and voltage class up to 33 KV)  
supplied against domestic contracts**

This price variation clause is applicable for 'Copper Wound Dry Type Distribution Transformers', with rating up to and including 2,500 KVA and voltage class up to 33 KV supplied against domestic contracts. A separate price variation clause IEEMA/PVC/DIST\_DT\_CU/DE/2021 has been evolved for above types of Transformers supplied against export/deemed export contracts under special imprest licensing scheme.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 7 + 35 \frac{C}{C_0} + 30 \frac{ES}{ES_0} + 7 \frac{IS}{IS_0} + 8 \frac{IM}{IM_0} + 7 \frac{ER}{ER_0} + 6 \frac{W}{W_0} \right)$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P<sub>0</sub> = Price quoted/confirmed.
- C<sub>0</sub> = Price of CC copper rods (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IS<sub>0</sub> = Price of HR Coil of 3.15 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ER<sub>0</sub> = Price of Epoxy resin (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.



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Effective from: 01 September 2021

W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Copper (C<sub>0</sub>), Epoxy Resin (ER<sub>0</sub>), CRGO Steel Sheets (ES<sub>0</sub>), HR Coil (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of tendering.

- C = Price of CC copper rods (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IS = Price of HR Coil of 3.15 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ER = Price of Epoxy resin (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of tendering.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Copper (C), Epoxy Resin (ER), CRGO Steel Sheets (ES), HR Coil (IS) and Insulating material (IM) should be as on 1<sup>st</sup> November 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of delivery.



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Effective from: 01 September 2021

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes: (a) All prices of raw materials are exclusive of GST amount and exclusive of any other central, state or local taxes etc..

a) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier

b) The details of prices are as under:

1. Price of 8 mm CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.
2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
3. Price of steel is the average retail price of HR Coil 3.15 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT
4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.
5. The price of Epoxy resin is price quoted by resin manufacturer for their grade CT 5900 or its nearest equivalent.

**Director**

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IEEMA/PVC/DIST\_CU\_upto 2.5 MVA/DE/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR COPPER WOUND DISTRIBUTION TRANSFORMERS  
 COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
 (For single & three phase of ratings up to and including 2,500 KVA and voltage class up to 33 KV)  
 supplied against Export/ Deemed Export contracts**

This price variation clause is applicable for 'Copper Wound Distribution Transformers', with rating up to and including 2,500 KVA and voltage class up to 33 KV supplied against export/deemed export contracts with duty free inputs under special imprest licensing scheme. A separate price variation clause IEEMA/PVC/DIST\_CU\_upto 2.5 MVA/2021 has been evolved for above types of Transformers supplied against domestic contracts.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 7 + 41 \frac{C}{C_0} + 23 \frac{ES}{ES_0} + 10 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 8 \frac{TO}{TO_0} + 6 \frac{W}{W_0} \right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P<sub>0</sub> = Price quoted/confirmed.C<sub>0</sub> = Price of CC copper rods (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.IS<sub>0</sub> = Price of HR Coil of 3.15 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.



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$W_0$  = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Copper ( $C_0$ ), Transformer Oil ( $TO_0$ ), CRGO Steel Sheets ( $ES_0$ ), HR Coil ( $IS_0$ ) and Insulating material ( $IM_0$ ) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. ( $W_0$ ) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/DE/\_/\_ **ONE** month prior to the date of tendering.

- $C$  = Price of CC copper rods (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $ES$  = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $IS$  = Price of HR Coil of 3.15 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $IM$  = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $TO$  = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $W$  = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Copper ( $C$ ), Transformer Oil ( $TO$ ), CRGO Steel Sheets ( $ES$ ), HR Coil ( $IS$ ) and Insulating material ( $IM$ ) should be as on 1<sup>st</sup> November 2022 and all India average consumer price index number ( $W$ ) should be for the month of September 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/DE/\_/\_ **ONE** month prior to the date of delivery.

IEEMA/PVC/DIST\_CU\_upto 2.5 MVA/DE/2021

Effective from: 01 September 2021

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

## Notes:

- (a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- (b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- (c) The details of prices are as under:
  1. Price of 8 mm CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
  3. Price of steel is the average retail price of HR Coil 3.15 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- (d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_o}{92} \left( 7 + 41 \frac{C}{C_o} + 23 \frac{ES}{ES_o} + 10 \frac{IS}{IS_o} + 5 \frac{IM}{IM_o} + 6 \frac{W}{W_o} \right)$$

Where description of P, P<sub>o</sub>, C, ES, IS, IM, W etc. remains same as mentioned earlier.



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IEEMA/PVC/DIST\_AL\_upto 2.5 MVA/DE/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR ALUMINIUM WOUND DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(For single & three phase of ratings up to and including 2,500 KVA and voltage class up to 33 KV)  
supplied against Export/ Deemed Export contracts**

This price variation clause is applicable for 'Aluminium Wound Distribution Transformers', with rating up to and including 2,500 KVA and voltage class up to 33 KV supplied against export/deemed export contracts under special imprest licensing scheme. A separate price variation clause IEEMA/PVC/DIST\_AL\_upto 2.5 MVA/2021 has been evolved for above types of Transformers supplied against domestic contracts.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 8 + 22 \frac{AL}{AL_0} + 36 \frac{ES}{ES_0} + 12 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 10 \frac{TO}{TO_0} + 7 \frac{W}{W_0} \right)$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P<sub>0</sub> = Price quoted/confirmed.
- AL<sub>0</sub> = LME CSP Average of Aluminium (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IS<sub>0</sub> = Price of HR Coil of 3.15 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.



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W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Aluminium (AL<sub>0</sub>), Transformer Oil (TO<sub>0</sub>), CRGO Steel Sheets (ES<sub>0</sub>), HR Coil (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/DE/\_/\_ **ONE** month prior to the date of tendering.

AL = LME CSP Average of Aluminium (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

ES = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

IS = Price of HR Coil of 3.15 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

IM = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

TO = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Aluminium (AL), Transformer Oil (TO), CRGO Steel Sheets (ES), HR Coil (IS) and Insulating material (IM) should be as on 1<sup>st</sup> November 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/DE/\_/\_ **ONE** month prior to the date of delivery.



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The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes:

- (a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- (b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- (c) The details of prices are as under:
  1. Price of LME average Cash SELLER Settlement price of Primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US\$ per MT is converted in Indian Rs./MT using exchange rate.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
  3. Price of steel is the average retail price of HR Coil 3.15 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_0}{90} \left( 8 + 22 \frac{AL}{AL_0} + 36 \frac{ES}{ES_0} + 12 \frac{IS}{IS_0} + 5 \frac{IM}{IM_0} + 7 \frac{W}{W_0} \right)$$

Where description of P, P<sub>0</sub>, AL, ES, IS, IM, W etc. remains same as mentioned earlier

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IEEMA/PVC/DIST\_CU\_Above 2.5 MVA/DE/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR COPPER WOUND DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(of ratings above 2,500 KVA and voltage class up to 33 KV)  
supplied against Export/ Deemed Export contracts**

This price variation clause is applicable for 'Copper Wound Distribution Transformers' for single & three phase of rating above 2,500 KVA and voltage class up to 33 KV; supplied against export/deemed export contracts under special imprest licensing scheme. A separate price variation clause IEEMA/PVC/DIST\_CU\_Above 2.5 MVA/2021 has been evolved for above types of Transformers supplied against domestic contracts.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 8 + 40 \frac{C}{C_0} + 24 \frac{ES}{ES_0} + 8 \frac{IS}{IS_0} + 4 \frac{IM}{IM_0} + 8 \frac{TO}{TO_0} + 8 \frac{W}{W_0} \right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P<sub>0</sub> = Price quoted/confirmed.C<sub>0</sub> = Price of CC copper rods (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.IS<sub>0</sub> = Price of MS Plate of 6 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.



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IEEMA/PVC/DIST\_CU\_Above 2.5 MVA/2021

Effective from: 01 September 2021

$W_0$  = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Copper ( $C_0$ ), Transformer Oil ( $TO_0$ ), CRGO Steel Sheets ( $ES_0$ ), MS Plate ( $IS_0$ ) and Insulating material ( $IM_0$ ) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. ( $W_0$ ) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/DE/\_/\_ **ONE** month prior to the date of tendering.

- $C$  = Price of CC copper rods (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $ES$  = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** months prior to the date of delivery.
- $IS$  = Price of MS Plate of 6 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $IM$  = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $TO$  = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- $W$  = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Copper ( $C$ ), Transformer Oil ( $TO$ ), MS Plate ( $IS$ ) and Insulating material ( $IM$ ) should be as on 1<sup>st</sup> November 2022, price of CRGO Steel Sheets ( $ES$ ) as on 1<sup>st</sup> October 2022 and all India average consumer price index number ( $W$ ) should be for the month of September 2022.

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.





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## Notes:

- a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- c) The details of prices are as under:
  1. Price of 8 mm CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.
  2. The price of CRGO Electrical Steel Lamination is suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
  3. Price of steel is the average retail price of MS Plate 6 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_0}{92} \left( 8 + 40 \frac{C}{C_0} + 24 \frac{ES}{ES_0} + 8 \frac{IS}{IS_0} + 4 \frac{IM}{IM_0} + 8 \frac{W}{W_0} \right)$$

Where description of P, P<sub>0</sub>, C, ES, IS, IM, W etc. remains same as mentioned earlier.

Director

IEEMA/PVC/DIST\_AL\_Above 2.5 MVA/DE/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR ALUMINIUM WOUND DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(of ratings above 2,500 KVA and voltage class up to 33 KV)  
supplied against Export/ Deemed Export contracts**

This price variation clause is applicable for 'Aluminium Wound Distribution Transformers' for single & three phase of rating above 2,500 KVA and voltage class up to 33 KV; supplied against export/deemed export contracts under special imprest licensing scheme. A separate price variation clause IEEMA/PVC/DIST\_AL\_Above 2.5 MVA/2021 has been evolved for above types of Transformers supplied against domestic contracts.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 9 + 16 \frac{AL}{AL_0} + 35 \frac{ES}{ES_0} + 14 \frac{IS}{IS_0} + 6 \frac{IM}{IM_0} + 11 \frac{TO}{TO_0} + 9 \frac{W}{W_0} \right)$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P<sub>0</sub> = Price quoted/confirmed.

AL<sub>0</sub> = LME CSP Average of Aluminium (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

IS<sub>0</sub> = Price of MS Plate of 6 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

TO<sub>0</sub> = Price of Transformer Oil (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.



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W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Aluminium (AL<sub>0</sub>), Transformer Oil (TO<sub>0</sub>), MS Plate (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and CRGO Steel Sheets (ES<sub>0</sub>) should be as on October 2021, and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/\_/ **ONE** month prior to the date of tendering.

- AL = LME CSP Average of Aluminium (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IS = Price of MS Plate of 6 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- TO = Price of Transformer Oil (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Aluminium (AL), Transformer Oil (TO), MS Sheet (IS) and Insulating material (IM) should be as on 1<sup>st</sup> November 2022 and CRGO Steel Sheets (ES) should be as on 1<sup>st</sup> October 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.





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## Notes:

- a) All prices are exclusive of GST amount and exclusive of any other central, state or local taxes etc.
- b) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier
- c) The details of prices are as under:
  1. Price of LME average Cash SELLER Settlement price of Primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US\$ per MT is converted in Indian Rs./MT using exchange rate.
  2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers.
  3. Price of steel is the average retail price of MS Plate 6 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
  4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers.
  5. The price of Transformer Oil (in Rs./K.Ltr) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.
- d) Some purchasers are purchasing oil immersed Transformers from manufacturers without first filling of oil. Oil for first filling is procured and filled by the purchasers. For such supplies PVC formula, excluding Oil will apply as under:

$$P = \frac{P_o}{89} \left( 9 + 16 \frac{AL}{AL_o} + 35 \frac{ES}{ES_o} + 14 \frac{IS}{IS_o} + 6 \frac{IM}{IM_o} + 9 \frac{W}{W_o} \right)$$

Where description of P, P<sub>o</sub>, AL, ES, IS, IM, W etc. remains same as mentioned earlier.

Director



IEEMA/PVC/DIST\_DT\_CU/DE/2021

Effective from: 01 September 2021

**PRICE VARIATION CLAUSE FOR COPPER WOUND DRY TYPE DISTRIBUTION TRANSFORMERS  
COMPLETE WITH ALL ACCESSORIES AND COMPONENTS  
(Of ratings up to 2,500 KVA and voltage class up to 33 KV)  
supplied against Export/ Deemed Export contracts**

This price variation clause is applicable for 'Copper Wound Dry Type Distribution Transformers', with rating up to 2,500 KVA and voltage class up to 33 KV supplied against export/deemed export contracts under special imprest licensing scheme. A separate price variation clause IEEMA/PVC/DIST\_DT\_CU/2021 has been evolved for above types of Transformers supplied against domestic contracts.

The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices/indices, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = \frac{P_0}{100} \left( 7 + 35 \frac{C}{C_0} + 30 \frac{ES}{ES_0} + 7 \frac{IS}{IS_0} + 8 \frac{IM}{IM_0} + 7 \frac{ER}{ER_0} + 6 \frac{W}{W_0} \right)$$

Wherein,

- P = Price payable as adjusted in accordance with the above formula.
- P<sub>0</sub> = Price quoted/confirmed.
- C<sub>0</sub> = Price of CC copper rods (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ES<sub>0</sub> = Price of CRGO Electrical Steel Lamination (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IS<sub>0</sub> = Price of HR Coil of 3.15 mm thickness (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- IM<sub>0</sub> = Price of Insulating Materials (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.
- ER<sub>0</sub> = Price of Epoxy resin (refer notes)  
This price is as applicable for the month, **ONE** month prior to the date of tendering.

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W<sub>0</sub> = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of tendering.

For example, if date of tendering falls in December 2021, applicable prices of Copper (C<sub>0</sub>), Epoxy Resin (ER<sub>0</sub>), CRGO Steel Sheets (ES<sub>0</sub>), HR Coil (IS<sub>0</sub>) and Insulating material (IM<sub>0</sub>) should be as on 1<sup>st</sup> November 2021 and all India average consumer price index no. (W<sub>0</sub>) should be for the month of September 2021.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/DE/\_/\_ **ONE** month prior to the date of tendering.

- C = Price of CC copper rods (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ES = Price of CRGO Electrical Steel Lamination (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IS = Price of HR Coil of 3.15 mm thickness (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- IM = Price of Insulating Materials (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of delivery.
- ER = Price of Epoxy resin (refer notes)  
 This price is as applicable for the month, **ONE** month prior to the date of tendering.
- W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100)  
 This index number is as applicable for the month, **THREE** months prior to the date of delivery.

For example, if date of delivery in terms of clause given below falls in December 2022, applicable prices of Copper (C), Epoxy Resin (ER), CRGO Steel Sheets (ES), HR Coil (IS) and Insulating material (IM) should be as on 1<sup>st</sup> November 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA(PVC)/PWR\_DIST\_TRF (R-1)/DE/\_/\_ **ONE** month prior to the date of delivery.





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The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes: (a) All prices of raw materials are exclusive of GST amount and exclusive of any other central, state or local taxes etc..

a) Date of Tendering is the due date of tender submission or date of tender opening whichever is earlier

b) The details of prices are as under:

1. Price of 8 mm CC copper rods (in Rs/MT) is ex-works price as quoted by the primary producer.
2. The price of CRGO Electrical Steel Lamination suitable for Transformers of voltage up to 33 KV is the average price as quoted by processing centres of mills and lamination suppliers
3. Price of steel is the average retail price of HR Coil 3.15 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT
4. The average price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 3 mm and 10 mm thick, 3200 mm x 4100 mm C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1<sup>st</sup> working day of the month as quoted by primary suppliers.
5. The price of Epoxy resin is price quoted by resin manufacturer for their grade CT 5900 or its nearest equivalent.

**Director**

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